

B<sub>1</sub>  
at least one horizontal locator for urging the friction surface into contact with the non-metallic guide rail at a pressure of not more than approximately 50 psi on the non-metallic guide rail; and

an actuator for triggering urging of the friction surface by the horizontal locator.

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16. The guide rail safety device as claimed in claim 15, wherein the wedge further comprises a bearing surface that is harder than and inclined relative to the friction surface for engagement by the horizontal locator.

17. The guide rail safety device as claimed in claim 16, wherein the bearing surface is comprised of a material that is selected from steel and iron.

18. The guide rail safety device as claimed in claim 16, wherein the wedge further comprises a wedge-shaped body, wherein the friction surface is integral with the wedge-shaped body, and wherein the bearing surface is affixed to the wedge-shaped body.

Sub C<sub>3</sub> 19. The guide rail safety device as claimed in claim 15, wherein the friction surface is formed of a material that has a coefficient of friction of at least approximately 1.0 relative to the non-metallic guide rail.

20. The guide rail safety device as claimed in claim 15, wherein the friction surface is comprised of rubber material.

21. The guide rail safety device as claimed in claim 20, wherein the rubber material of the friction surface comprises vulcanized rubber.

✓ 22. The guide rail safety device as claimed in claim 15, wherein a plurality of the wedges is provided on each of two opposing sides of the non-metallic guide rail.

23. The guide rail safety device as claimed in claim 15, wherein the horizontal locators urge the friction surface into contact with the non-metallic guide rail in response to longitudinal movement of the wedge relative to the housing, and wherein the actuator causes the wedge to move longitudinally relative to the housing.

24. The guide rail safety device as claimed in claim 15, wherein the guide rail safety device is bidirectional, and two of the horizontal locators are arranged so that only one of the two horizontal locators at a time urges the friction surface into contact with the non-metallic guide rail, and wherein the actuator can trigger the urging of the friction surface by either of the two horizontal locators.

Sub B27 25. A guide rail safety device, for an elevator car riding on a non-metallic guide rail, the guide rail safety device comprising:  
a housing;  
a wedge disposed in the housing, the wedge having a friction surface aligned for contact with the non-metallic guide rail, the friction surface being formed of a material that has a coefficient of friction of at least approximately 1.0 relative to the non-metallic guide rail;  
at least one horizontal locator for urging the friction surface into contact with the non-metallic guide rail; and  
an actuator for triggering urging of the friction surface by the horizontal locator.

26. The guide rail safety device as claimed in claim 25, wherein the wedge further comprises a bearing surface that is harder than and inclined relative to the friction surface for engagement by the horizontal locator.

27. The guide rail safety device as claimed in claim 26, wherein the bearing surface is comprised of a material that is selected from steel and iron.

28. The guide rail safety device as claimed in claim 26, wherein the wedge comprises a wedge-shaped body, wherein the friction surface is integral with the

wedge-shaped body, and wherein the bearing surface is affixed to the wedge-shaped body.

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29. The guide rail safety device as claimed in claim 25, wherein the friction surface is sized so as to exert a pressure of not more than approximately 50 psi on the non-metallic guide rail.

30. The guide rail safety device as claimed in claim 25, wherein the friction surface is comprised of rubber material.

31. The guide rail safety device as claimed in claim 30, wherein the rubber material of the friction surface comprises vulcanized rubber.

✓ 32. The guide rail safety device as claimed in claim 25, wherein a plurality of the wedges is provided on each of two opposing sides of the non-metallic guide rail.

33. The guide rail safety device as claimed in claim 25, wherein the horizontal locators urge the friction surface into contact with the non-metallic guide rail in response to longitudinal movement of the wedge relative to the housing, and wherein the actuator causes the wedge to move longitudinally relative to the housing.

34. The guide rail safety device as claimed in claim 25, wherein the guide rail safety device is bidirectional, and two of the horizontal locators are arranged so that only one of the two horizontal locators at a time urges the friction surface into contact with the non-metallic guide rail, and wherein the actuator can trigger the urging of the friction surface by either of the two horizontal locators.--

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